Section IV. Mitigation Options

This section discusses mitigation options for sites where views are currently unobstructed but future development will result in degradation of the view. By employing mitigation options, the list of public places with protected views of the Space Needle could perhaps be expanded beyond only high-rated, matrix view sites to include medium- and even low-rated sites. This discussion focuses on what types of mitigation measures are currently available to prevent various degrees of view degradation and preserve some view of the Space Needle.

In SMC, Chapter 25.05.675 P2. Policies, ii. c., proposed projects may be conditioned or denied for mitigation. "Mitigation measures may include, but are not limited to:

i. *Requiring a change in the height of the development;*

ii. *Requiring a change in the bulk of the development;*

iii. *Requiring a redesign of the profile of the development;*

iv. *Requiring on-site view corridors or requiring enhancements to off-site view corridors;*

v. *Relocating the project on the site;*

vi. *Requiring a reduction or rearrangement of walls, fences or plant material; and*

vii. *Requiring a reduction or rearrangement of accessory structures including, but not limited to towers, railings and antennae."*

Actual projects would require individual reviews, since each presents a unique set of mitigation circumstances. Depending on what is involved, some measures such as reduction or rearrangement of walls, requiring on site view corridors, and slight changes in height may not equate to "economic hardships" for certain developments. On the other hand, other measures could prove costly and overly burdensome to property owners.

Through illustrations and 3-D imagery, the following view sites demonstrate possible types of mitigation for view protection compliance and are examples of so called, "minor" and "major" mitigation. Mitigation measures would be necessary in order to maintain the full (at least 3/4 structure plus all of the saucer) view rating of the Space Needle. Minor mitigation is defined as project compliance changes that have minor economic impacts and do not affect the Floor Area Ratio (FAR) of the project development. Major mitigation would be the opposite with negative impacts. Ideally an economic impact study would be necessary to fully review and quantify these mitigation impacts. King County is currently preparing an economic evaluation study for the Convention Center Transit site within the Denny-Triangle area that will provide additional impact information. For the status of this report, contact Metro-King County, Office of the Director, Department of Transportation 201 S. Jackson Street, Seattle, WA 98104.

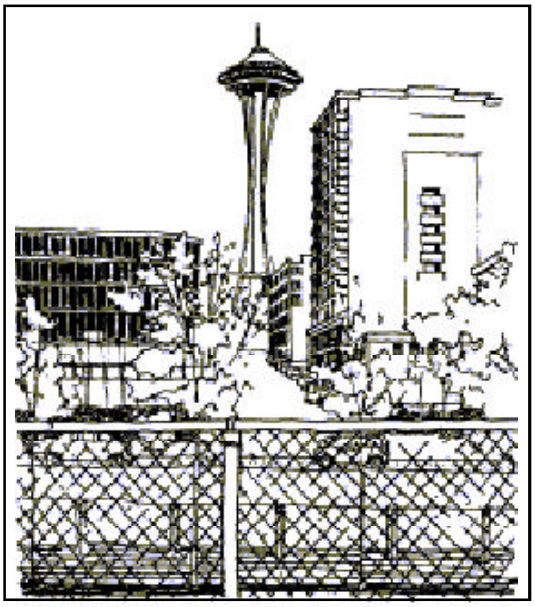


Figure 48: Current view from Olympic Sculpture Park (city-owned parcel)

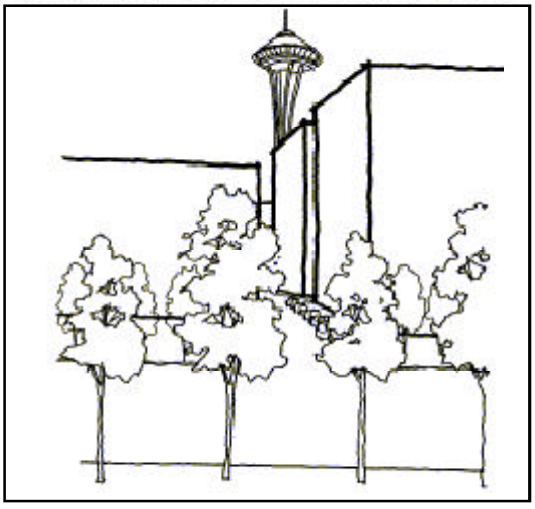


Figure 49: Partially obstructed view under full build-out based on current zoning

Minor mitigation

While it is difficult to quantify "minor" mitigation using hypothetical examples, the illustrations do show types of view protection measures that are possible. Many of these design changes involving setbacks, height and bulk variations, and minor profile changes are currently required view protection measures in the downtown sector along designated view corridor streets. The following mitigation examples illustrate upper level setbacks.

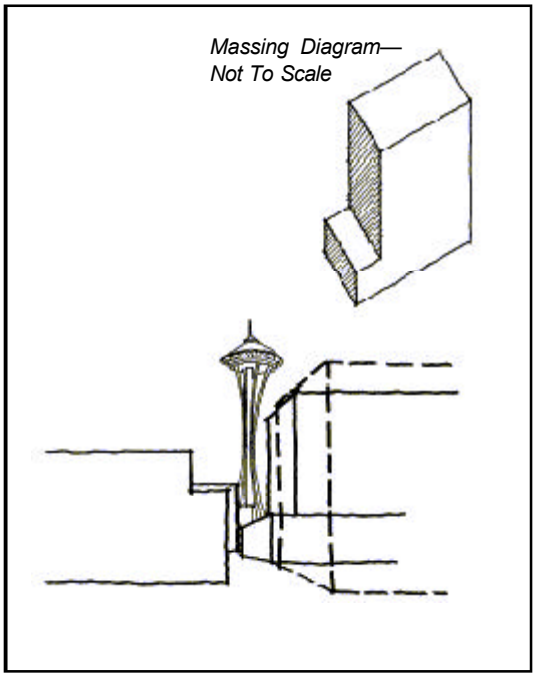
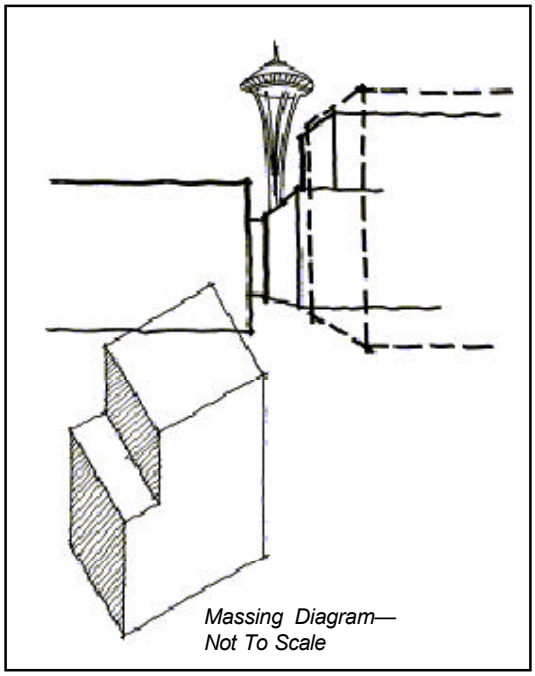


Figure 50

Figure 51



Figures 50 and 51:
Massing concepts exhibiting varying degrees of upper level setbacks

Four Columns Park — Case Study

Because of the community interest expressed over the future of Four Columns Park and the issues view protection from this park raises, a case study was made of the Park's view of the Space Needle in an effort to better understand and compare the significance of this view to the others studied and the extent to which mitigation of development activity in the view corridor was feasible without substantial reduction in zoned development capacity.

Mitigation Measures limiting heights within Space Needle view corridor.

The following computer-generated illustrations show various degrees of obstructed views based on height restrictions. These images exclude the Convention Center Transit site shown in the foreground in gray. Since this view corridor crosses through parcels, a series of mitigation measures would be necessary for new development in order to maintain a full Space Needle view. Even with lower heights, only partial views are maintained. The foreground transit site parcel would also require major mitigation measures to preserve a continuous corridor view path.

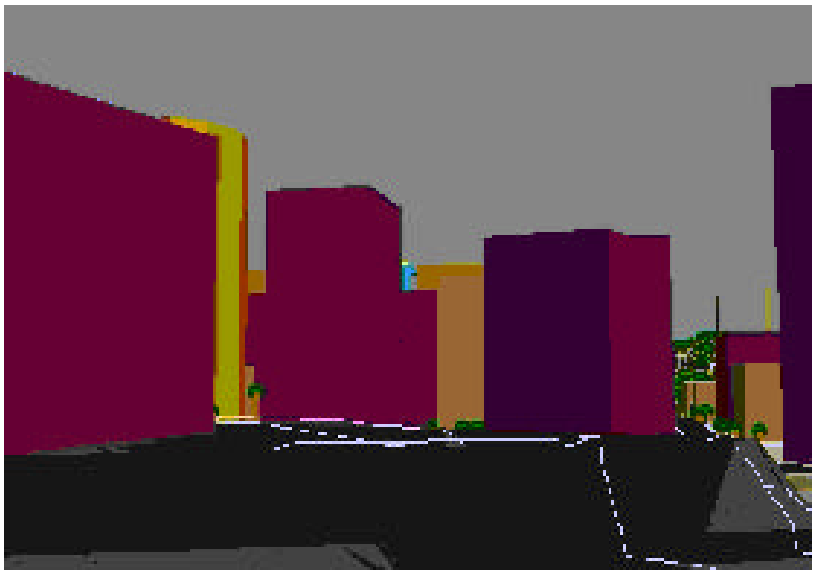


Figure 52: View with development built to current density and 300' height limits on potentially available sites (shown in purple).

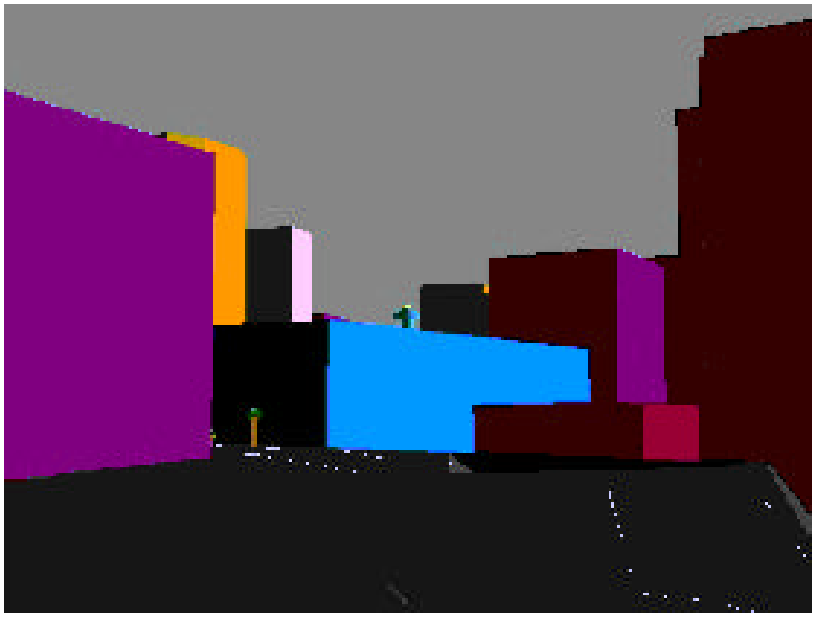


Figure 53: The blue building is an example of an 85' height limit on the western block of the Convention Center Transit site. Due to the higher topography of this parcel, the view is degraded at this height.

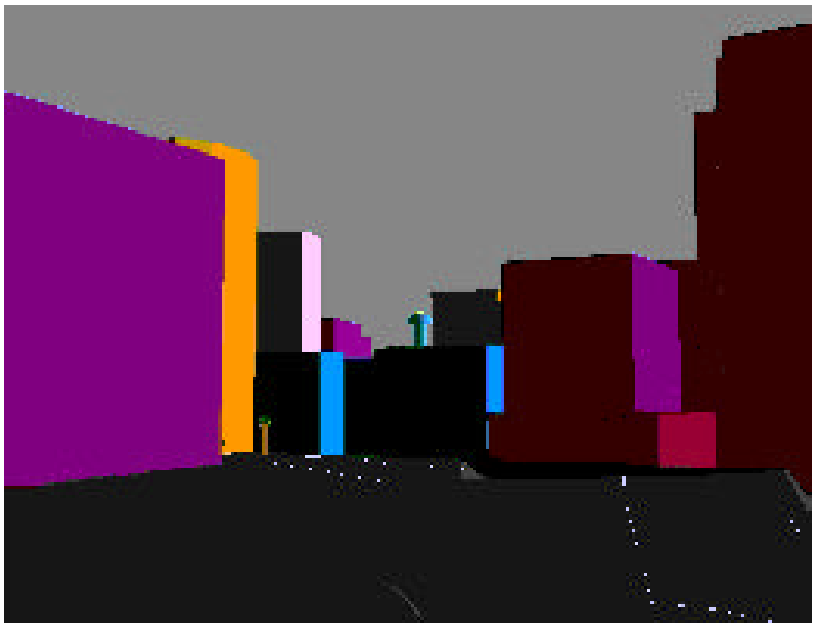


Figure 54: The blue buildings show 125' height limit with purple/pink buildings illustrating the potential 300' development on the edges of the view corridor.

Mitigation Measures: Building Configurations

These illustrations show the type of building configurations needed in order to maintain a full view corridor to the Space Needle. Based on development standards in SMC Chapter 23.49.068, Chapter 23.49.072, Chapter 23.49.076 and Chapter 23.49.078 plus view protection mitigation measures, these drawings show the design impacts on development within the Doc 2 zone with 300' height limits. Based on these illustrations alone, for a building to comply, the development would need to take advantage of Transfer of Development credits to increase height and have full block development capabilities in order to gain height, to spread bulk, and maintain a reasonable FAR.

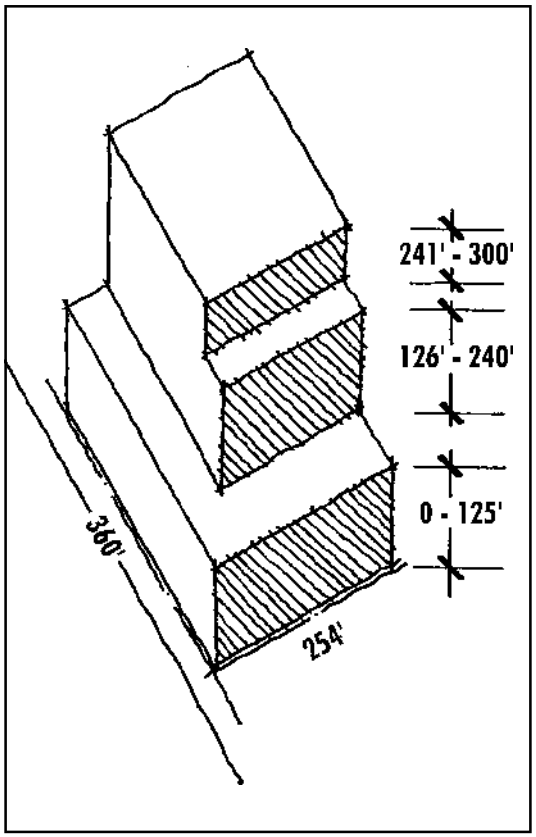


Figure 55: Example of a full block parcel development with greater bulk profile to maintain views and sufficient FAR. The illustration is based on a 360' x 254' full block with upper level development standards above 125'. Maximum height limit is 300'.

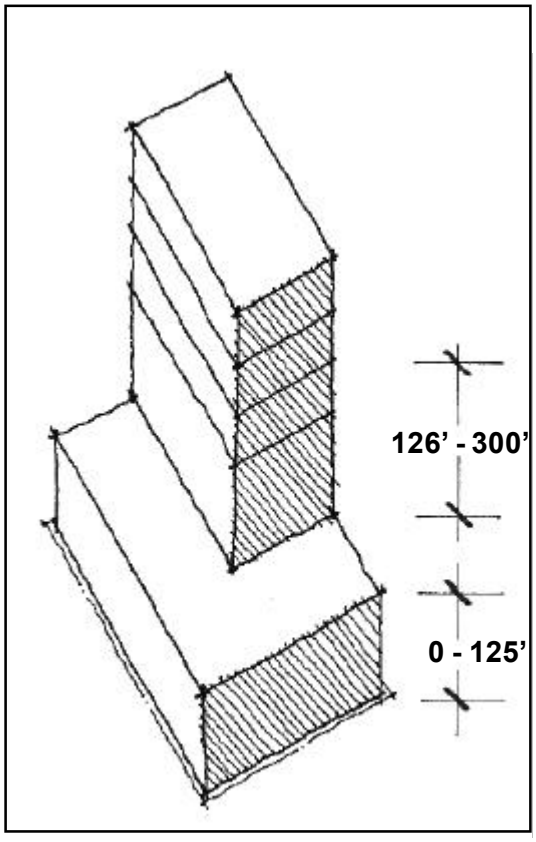


Figure 56: Example of a full block development using greater height allowances to maintain views and sufficient FAR. This illustration is based on a 360' x 254' full block with upper level development standards above 125'.

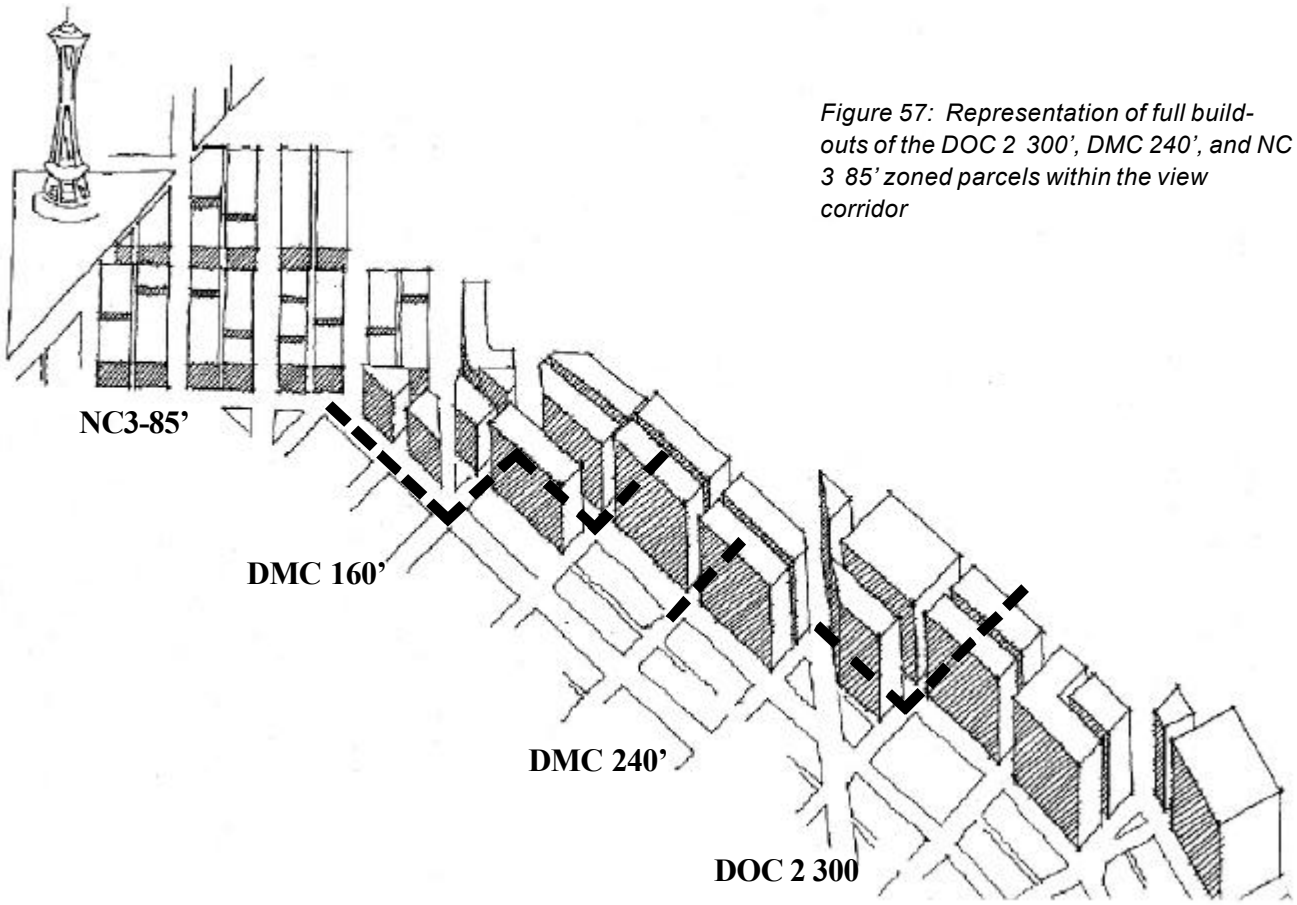


Figure 57: Representation of full build-outs of the DOC 2 300', DMC 240', and NC 3 85' zoned parcels within the view corridor

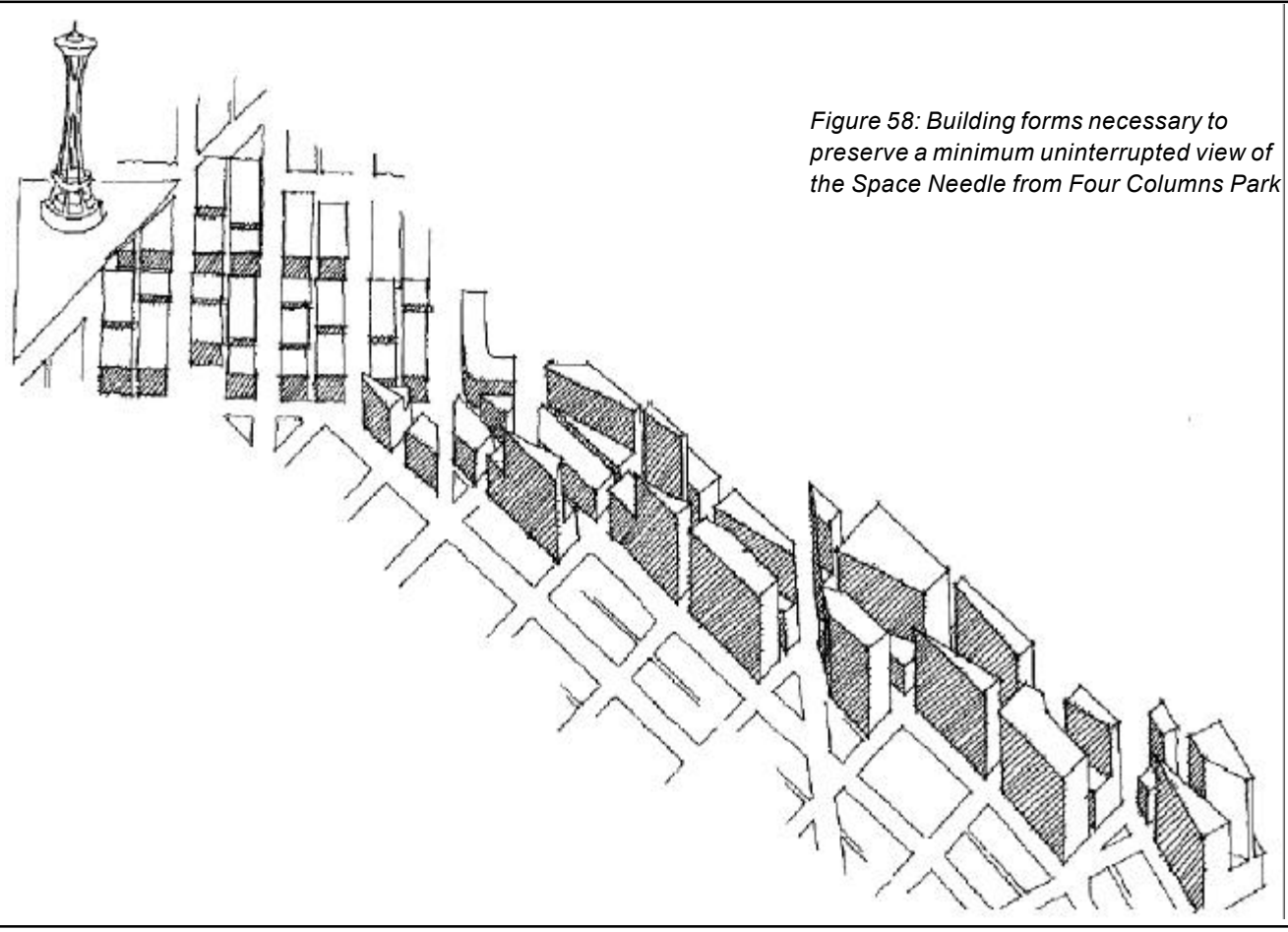


Figure 58: Building forms necessary to preserve a minimum uninterrupted view of the Space Needle from Four Columns Park

View Corridor Configurations

The illustrations on the opposite page indicate a series of building configurations within DOC 2, DMC 240 and DMC 160 zones to retain a view corridor from Four Columns Park to the Space Needle. Figure 57 represents full build-outs within the DOC 2 zone. Figure 58 is an aerial oblique sketch illustrating building forms necessary to preserve a continuous view corridor in this area. Neither figure represents what currently exists or what may actually be constructed. Figure 59 shows what this view might actually look like at eye level from Four Columns Park.

It should be noted that considering the effect of these more north/south-oriented building forms (for view corridor protection), an overall skyline view could be impacted from the east (Capitol Hill) resulting in long, uninterrupted wall-like east facades (Figure 60).

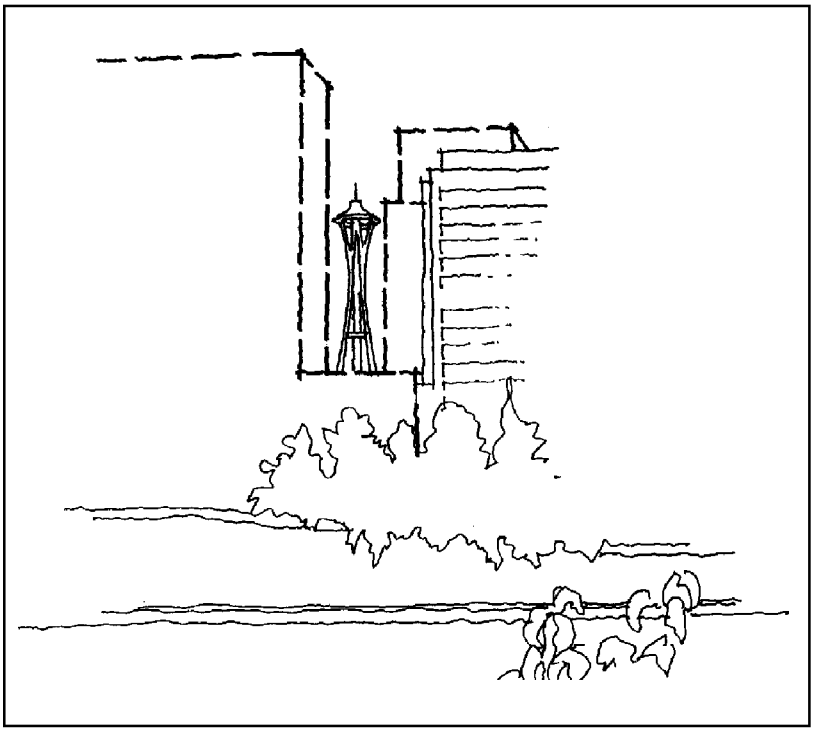


Figure 59: Looking through the view corridor

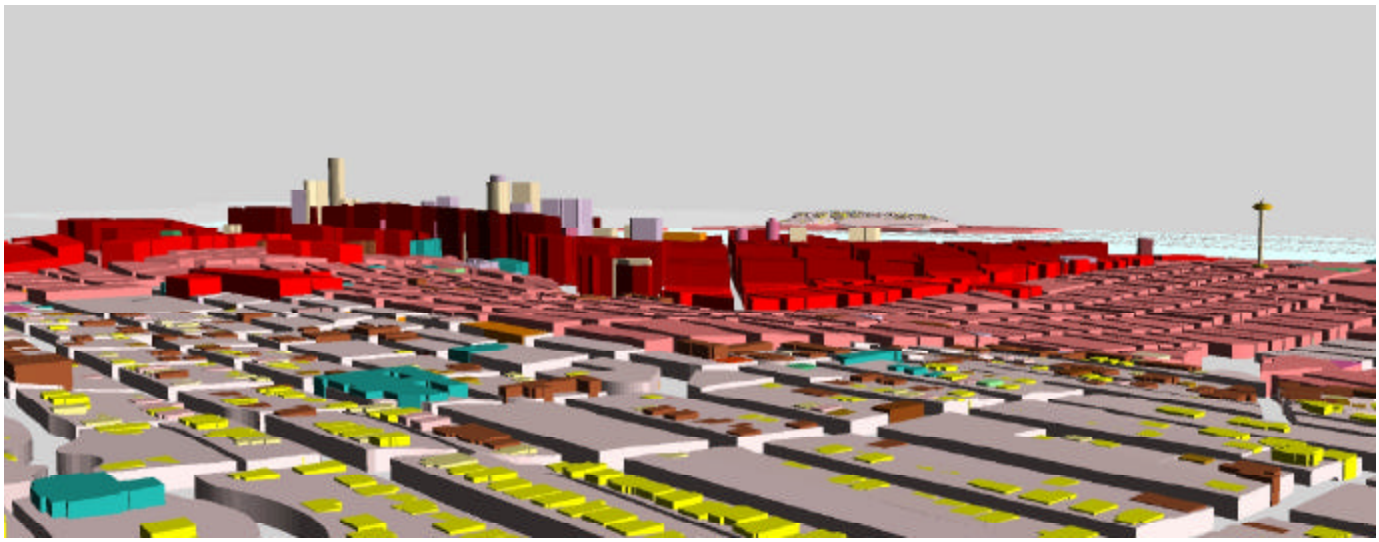
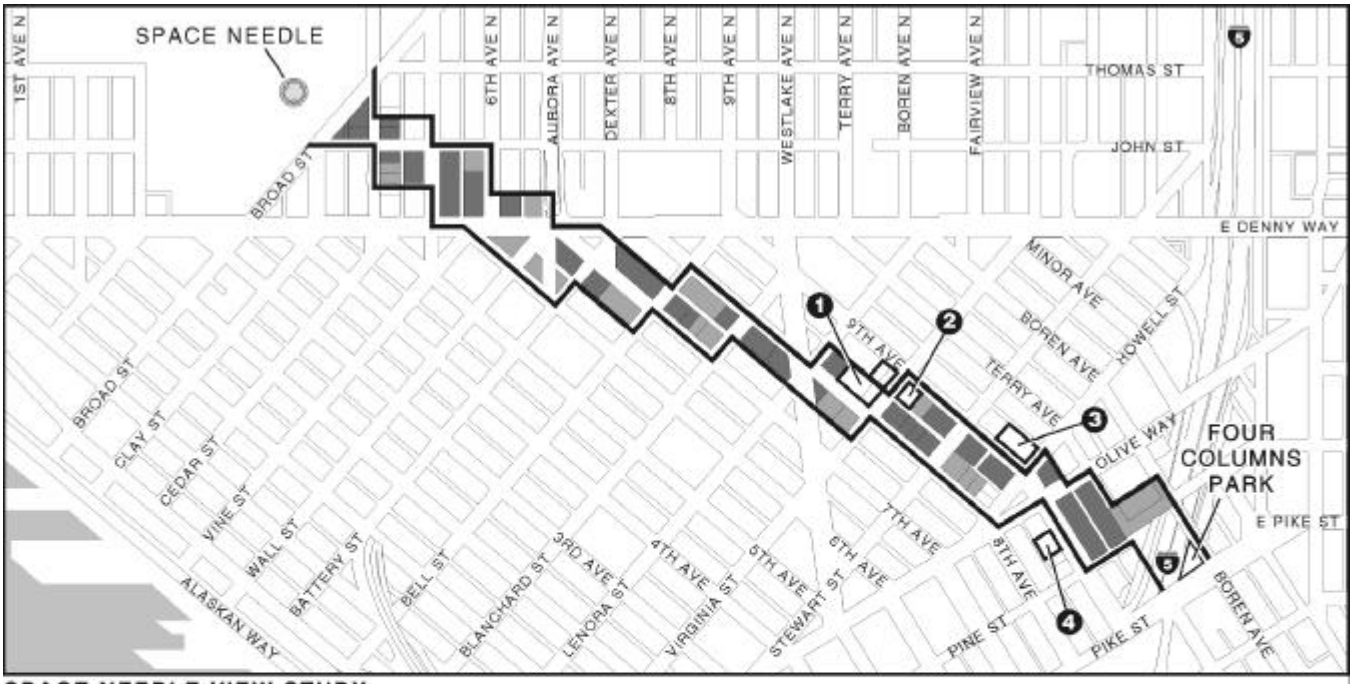


Figure 60: View from the east (Capitol Hill) of potential future development based on current zoning that would result in long, uninterrupted wall-like east facades

Map 28 identifies parcels that would be most directly affected by measures to maintain a view of the Space Needle from Four Columns Park. The map further distinguishes those parcels where future development options would likely be most severely constrained by the application of these measures. Combined, these parcels account for about 54 percent of the total parcel area within the corridor.

Map 28



SPACE NEEDLE VIEW STUDY

View Corridor: Space Needle from Four Columns Park

Parcels severely constrained by view alignment

Parcels with some flexibility for accommodating view alignment

Boundaries of view corridor

Special Conditions

1. West Precinct Station - low height of new project maintains view
2. 9th and Virginia; approved 30 story residential tower would define eastern edge of view corridor

Existing view window defined by:

3. Existing 800 9th Avenue Building
4. Camlin Hotel

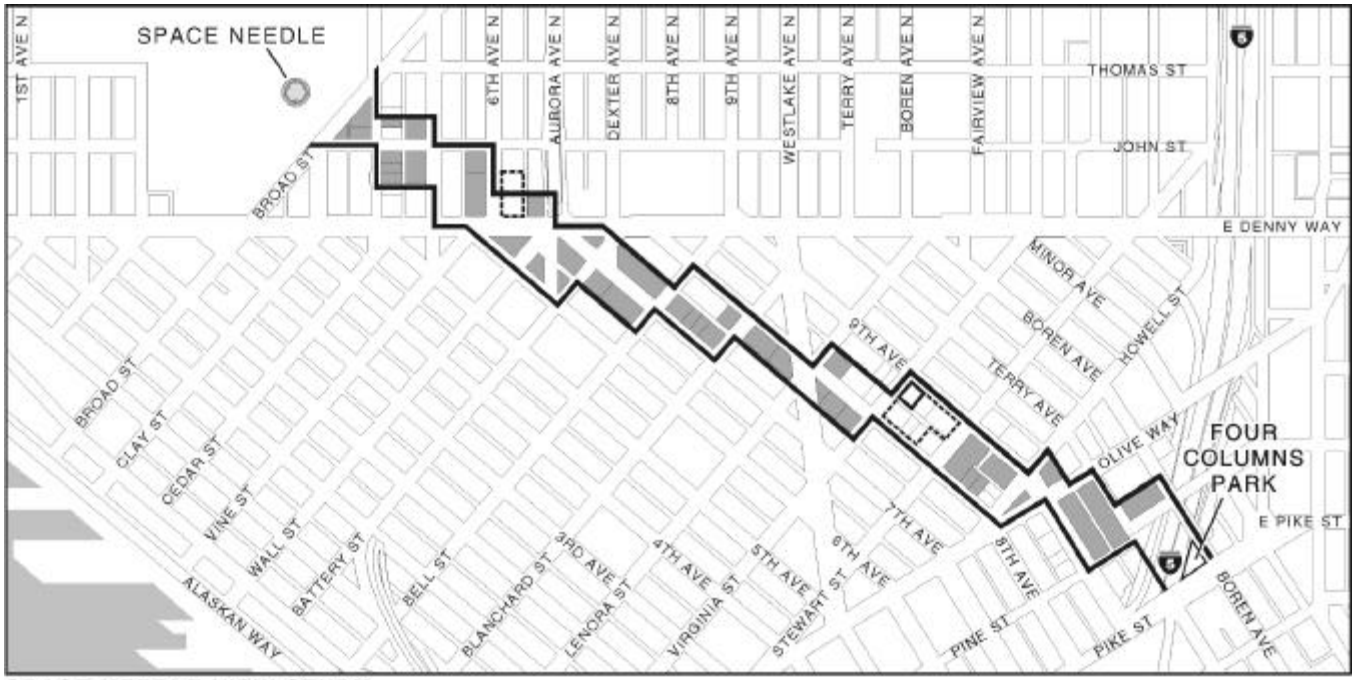
SCALE IN FEET

0 400 800 1200

N

Map 29 identifies those parcels that are considered likely to be available for redevelopment. The combination of parcels likely to be redeveloped and those with proposed projects accounts for about 85 percent of the total parcel area within the downtown portion of the view corridor.

Map 29



SPACE NEEDLE VIEW STUDY
View Corridor: Space Needle from Four Columns Park

- Approved projects
- Proposed project sites
- Parcels identified as potential re-development sites
- Boundaries of view corridor

SCALE IN FEET
0 400 800 1200

N

Skyline Views

The next illustrations focus on a wider skyline view from Four Columns Park where the Space Needle is part of a cityscape view. Based on future development plans within the Denny Triangle, protecting a full corridor view of the Space Needle may prove extremely difficult to achieve. In addition to a view of the Space Needle, the park also provides a NW view of the city as well as Queen Anne Hill in the distance. In this context, the Space Needle is one of many architectural elements that make up the view range.

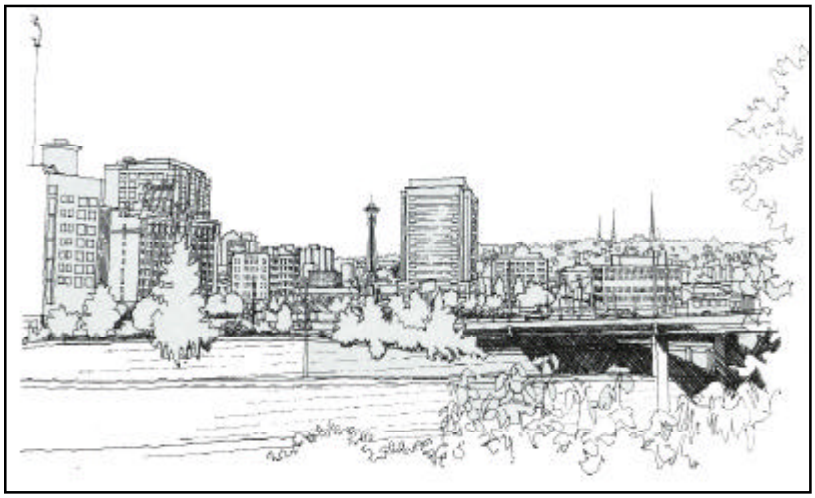


Figure 61:
Current skyline view from Four Columns Park looking northwest.

Figure 62: Illustration of potential building heights under current zoning with the Space Needle as part of the overall skyline view.

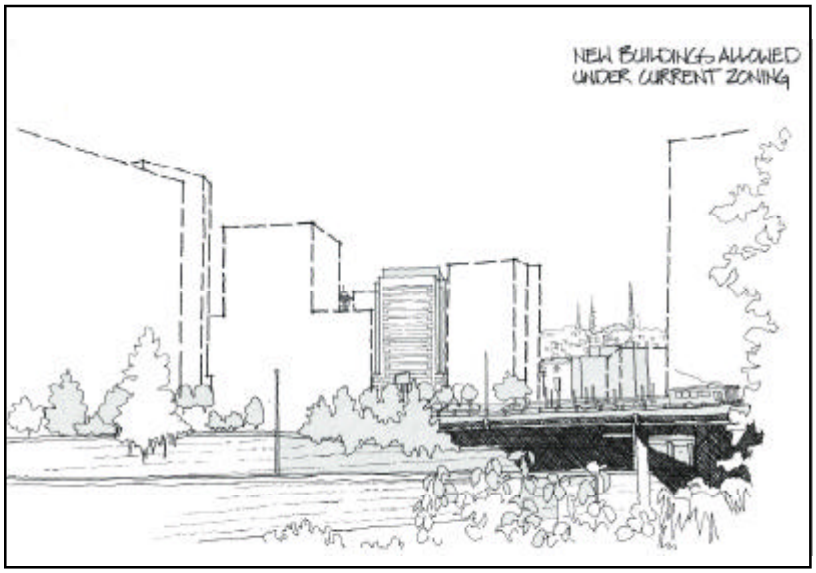
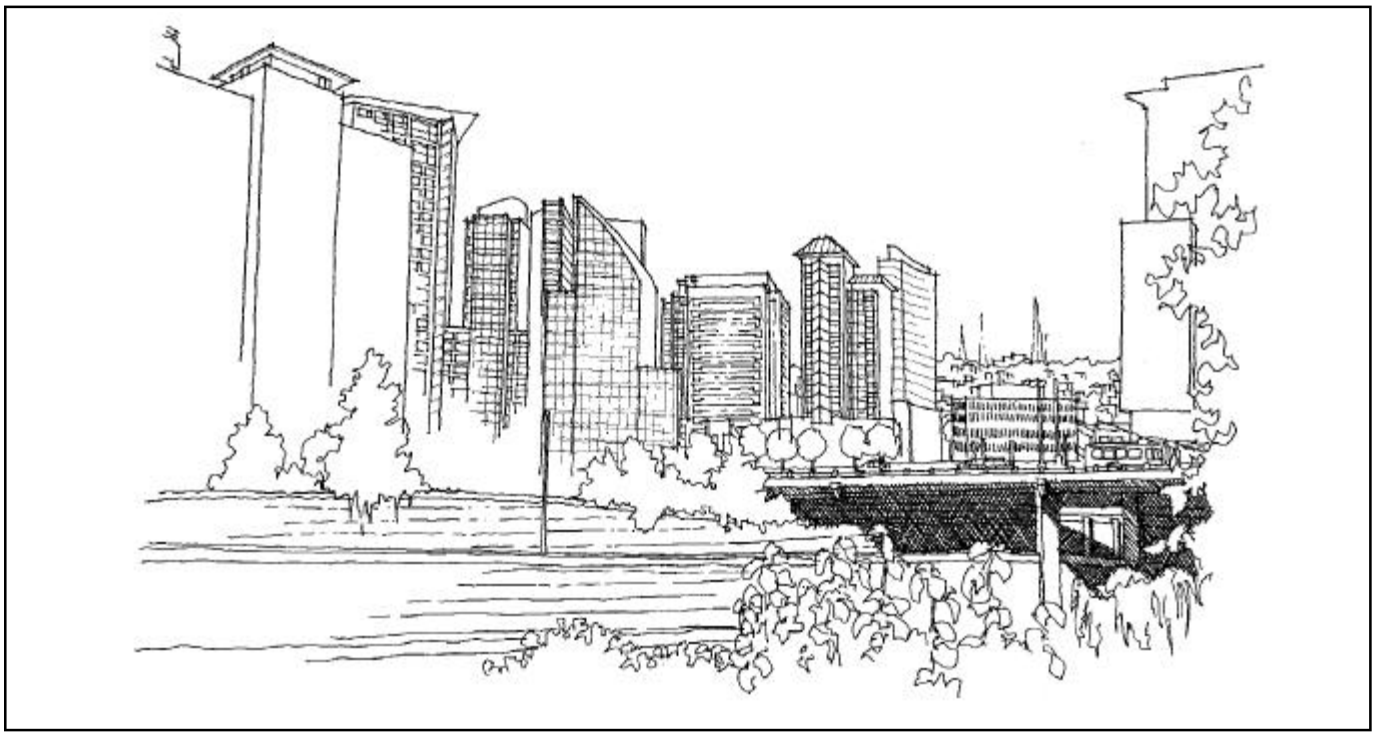


Figure 63:
Potential future development contributing to a distinctive skyline



Conclusions

Based on these perspective and isometric graphics exploring various mitigation measures from Four Columns Park the following conclusions are made:

As development occurs within the view corridor, the existing scope of the Space Needle view would diminish over time to a narrow "slot" between taller structures lining the edges of the corridor. Maintaining this limited view would have severe implications for development on sites located within the corridor.

The impact of measures to protect the Space Needle view would vary according to a number of factors, including:

- *the location of the parcel within the corridor—on the edge versus in the middle;*
- *the size of the parcel—a large parcel may provide sufficient area to allow taller portions of a project to be located outside the view line, while smaller parcels may not have such flexibility;*
- *the relation of the site to the street and alley grid and the opportunities to combine parcels, through such actions as alley vacations, to increase flexibility for locating structures outside the view alignment; and*
- *the topography—the elevation of the corridor drops over 100 feet moving from Four Columns Park towards Denny Way, and then rises again with the approach to Seattle Center. Views may still be able to be maintained over structures on sites in the lower elevations that would be blocked by structures of the same height in higher elevations.*

According to Tax Assessor's data, at least one third of the parcels at critical locations in the view corridor are less than a quarter block in size. Over half (6.8 acres) of the 13 acres within the Denny Triangle portion of the corridor are zoned DOC 2 - 300, a zone with a height limit of 300 feet. Another 4.2 acres is zoned DMC 240. The remainder has a height limit of 160 feet. ArcView 3-D images of these zones illustrate that structures built to heights of 85 feet in much of the corridor would block a significant portion of the Space Needle below the saucer. Therefore, to maintain views, height limits as low as 65 feet, and lower depending on topography, would have to be imposed on at least some portion of many of the sites with the view corridor.

Another complication of maintaining a view alignment is that the first project conditioned to maintain a gap through which the Space Needle can be seen would dictate the alignment for all other projects in the corridor. Requiring other sites to maintain the same alignment could further restrict options for development. The same alignment established on one site may not be able to be carried through a neighboring site because of its size or configuration, or because of its relation to the street/alley grid or adjacent development.

Additional considerations involving the City's Transfer Development Credit program, development implications in relation to the Comprehensive Plan, and view protection recommendations for Four Columns Park are discussed in the accompanying Seattle View Protection Policies, Vol. 1: Space Needle - Executive Report and Recommendations document.